



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/537,425

11/04/2005

Vito Alanzo

LSP-1011US

3149

87627

7590

07/15/2009

Mossman, Kumar & Tyler  
11200 Westheimer Rd.  
Suite 900  
Houston, TX 77042

EXAMINER

GILLESPIE, BENJAMIN

ART UNIT

PAPER NUMBER

1796

MAIL DATE

DELIVERY MODE

07/15/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/537,425	<b>Applicant(s)</b> ALANZO ET AL.	
	<b>Examiner</b> BENJAMIN J. GILLESPIE	<b>Art Unit</b> 1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 May 2009.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

*Note*

1. The claims filed 5/8/2009 contain new limitations not available for consideration when the previous non-final rejection was mailed 8/20/2008 - specifically that equivalent ratio between the polyisocyanate and the non-ionic alkyloxylated diol is such that there is 3-10 wt% of free isocyanate in the resulting blocked polyisocyanate. Therefore, although the instant rejection contains new grounds of rejection regarding claims 1-5 and 15-18, it is still proper to make the instant action FINAL since said grounds were necessitated by applicants' amendment.
2. Additionally the language of claim 1: "non-ionic **alkyloxylated** diol is such that the percentage of free isocyanate...." appears to have misspelled "alkoxylated".

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Obviousness Rejection I**

3. **Claims 1-3 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumbach et al ('536) in view of Buter et al (WO 97/19120) or in the alternative Ishiyama et al ('867).
4. **Regarding claims 1-3 and 5:** The rejection has been previously set forth in paragraphs 2-4 of the non-final rejection mailed 8/20/2008, and is herein incorporated by reference.

Art Unit: 1796

5. Regarding the newly present limitation of claim 1, which requires an NCO content between 3 and 10 wt%, Baumbach et al teach NCO contents in examples 1 and 2 of 6.85 wt% and 8.42 wt%, which coincide with the claimed range.

### **Obviousness Rejection II**

6. **Claims 4 and 15-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Baumbach et al ('536) in view of Buter et al (WO 97/19120) or in the alternative Ishiyama et al ('867) in further view of Reiff et al ('737).

7. **Regarding claims 4 and 15-19:** The rejection has been previously set forth in paragraphs 5-9 of the non-final rejection mailed 8/20/2008, and is herein incorporated by reference.

### **Obviousness Rejection III**

8. **Claims 1-3, 5-7, 11-14** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonderko et al (2002/0061999) in view of Buter et al (WO 97/19120) or in the alternative Ishiyama et al ('867).

9. **Regarding claims 1-3, 5-7, and 11-14:** The rejection has been previously set forth in paragraphs 10-12 of the non-final rejection mailed 8/20/2008, and is herein incorporated by reference.

10. Regarding the newly present limitation of claim 1, which requires an NCO content between 3 and 10 wt%, Jonderko et al teach NCO contents in examples 1 and 2 of 7.8 and 7.7 wt% which coincide with the claimed range.

### **Obviousness Rejection IV**

11. **Claims 4, 8-10 and 14-19** are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonderko et al (2002/0061999) in view of Buter et al (WO 97/19120) or in the alternative Ishiyama et al ('867) and in further view of Reiff et al ('737).

12. **Regarding claims 4, 8-10, and 14-19:** The rejection has been previously set forth in paragraphs 13-17 of the non-final rejection mailed 8/20/2008, and is herein incorporated by reference.

***Response to Arguments***

13. Applicant's arguments with respect to the rejection of claims 1-19 as being anticipated by Yao et al ('518) have been considered and are persuasive. The rejection has been withdrawn.

14. Applicant's arguments with respect to the rejection of claims 6, 7, and 11-14 as being unpatentable over Baumbach et al ('536) in view of Buter et al (WO 97/19120) or in the alternative Ishiyama et al ('867) have been considered and are persuasive. The rejection has been withdrawn.

15. Applicant's arguments with respect to the rejection of claims 8-10 as being unpatentable over Baumbach et al ('536) in view of Buter et al (WO 97/19120) or in the alternative Ishiyama et al ('867) in further view of Reiff et al ('737) have been considered and are persuasive. The rejection has been withdrawn.

16. Applicant's arguments with respect to the rejection of

- i) Claims 1-3 and 5 as being unpatentable over Baumbach et al ('536) in view of Buter et al (WO 97/19120) or in the alternative Ishiyama et al ('867),

- ii) Claims 4 and 15-19 as being unpatentable over Baumbach et al ('536) in view of Buter et al (WO 97/19120) or in the alternative Ishiyama et al ('867) in further view of Reiff et al ('737),
  - iii) Claims 1-3, 5-7, 11-14 as being unpatentable over Jonderko et al (2002/0061999) in view of Buter et al (WO 97/19120) or in the alternative Ishiyama et al ('867), and
  - iv) Claims 4, 8-10 and 14-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jonderko et al (2002/0061999) in view of Buter et al (WO 97/19120) or in the alternative Ishiyama et al ('867) and in further view of Reiff et al ('737)
17. Have been fully considered but are not persuasive.
18. Regarding issues i) and ii), applicants argue that the claimed invention is not rendered obvious by the prior art because Baumbach et al fail to teach an equivalent ratio of free NCO to blocking compound that is greater than 1. While this is noted, applicants are reminded that claim 1 is not limited to this ratio and therefore applicants' remarks are not persuasive since they are not commensurate in scope with the rejected claims.
19. Additionally, applicants argue that the claimed invention is not rendered obvious by the prior art since the claims do not list hydrazide reactant – which is required by Baumbach et al. While this position has been noted, as discussed in paragraph 4, the non-ionic blocked polyisocyanate of Baumbach et al still contains all of the listed reactants in amounts that satisfy the claimed NCO content, and the currently claimed invention does not exclude hydrazide.

Art Unit: 1796

20. Regarding issues iii) and iv), applicants argue that the claimed invention is not rendered obvious by the prior art because the relied upon hydrophilic polyether of Buter et al is disclosed “in a list, all components of which are defined as ‘non limiting examples of suitable compounds’...” and therefore one would not be motivated to glean just the relied upon polyether.

21. In response, it is noted page 9, lines 15+ of Buter et al teach numerous hydrophilic polyethers, however as discussed in paragraph 3 of the non-final rejection mailed 8/20/2008 herein incorporated by reference, Buter et al exemplify suitable polyethers consisting of Tegomer D-3123, D-3409, and D-3403. These polyethers are identical to the hydrophilic polyether used by applicants. Therefore contrary to applicants’ assertions one would be motivated to arrive at the claimed hydrophilic polyether since it is exemplified by Buter et al.

22. Applicants also argue that the claimed invention is patentable over the prior art because both Buter et al and Ishiyama et al require both ionic and non-ionic groups in order to render their respective polyurethane hydrophilic.

23. In response, applicants are reminded that the claimed invention has been rejected over Jonderko et al *in view of* Buter et al/Ishiyama et al and **NOT** Buter et al/Ishiyama et al in view of Jonderko et al. While the overall compositions of the secondary teachings require ionic groups, said secondary teachings were not relied upon for their overall composition. Instead said secondary teachings were merely relied upon for specific examples of suitable non-ionic hydrophilicizing compounds that satisfy the requirements set forth in paragraphs 24 of Jonderko et al.

Art Unit: 1796

24. What's more, Jonderko et al explicitly teach that said water-dispersible polyisocyanate may be produced using *only* non-ionic hydrophilicizing agents, and therefore one of ordinary skill would have a reasonable expectation of success in rendered the polyisocyanate of Jonderko et al hydrophilic using only the relied upon polyether of Buter et al and Ishiyama et al since said polyether satisfies the requirements of Jonderko et al set forth in paragraph 24 and Jonderko et al teach ionic groups may be omitted.

### ***Conclusion***

25. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

26. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BENJAMIN J. GILLESPIE whose telephone number is (571)272-2472. The examiner can normally be reached on 8am-5:30pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be



Art Unit: 1796

reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

28. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Benjamin J Gillespie/  
Examiner, Art Unit 1796

/Vasu Jagannathan/  
Supervisory Patent Examiner, Art Unit 1796